

Table 1-1

Comparison of some important ACOE specifications for Lower Columbia River Dam studies and achievement of the HI-Z balloon tag-recapture methodology on young salmonids in twelve studies at similar dams within the last three years (1993-1995). Results achieved in the present spill study are also given.

Attribute	ACOE Specification	Past Performance of Methodology	Present Study
Effects on non-study fish	None	No effects on non-study fish	None
Precision on survival estimate	$\pm 5\%$ at 90% CI	$\leq \pm 4\%$ at 90% confidence interval*	$\leq \pm 4\%$ at 90% confidence interval*
Recovery rates	$\geq 80\%$	$\geq 93\%$	$\geq 97\%$
Holding time	48 h	48 h to >25 days	48 h
Recovery time	≤ 1 h	≤ 10 minutes	≤ 8 minutes
Characterization of injury/condition	Yes	Done in all studies	Completed
Research subjects	Salmon/steelhead	12 studies completed on salmonids	Chinook salmon
Statistical analysis	Model unspecified	Model already developed	Completed

* Precision of $< \pm 4\%$ achieved with a release of 250 treatment and 250 control chinooks.